(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 29 January 2004 (29.01.2004)

PCT

(10) International Publication Number WO 2004/008865 A1

(51) International Patent Classification7:

A23B 9/26

(21) International Application Number:

PCT/US2003/022953

(22) International Filing Date: 22 July 2003 (22.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/397,833

23 July 2002 (23.07.2002) US

(71) Applicant (for all designated States except US): [US/US]; CARGILL, INCORPORATED McGinty Road West, Wayzata, MN 55391 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): SHANDERA, Donald, Lee, Jr. [US/US]; 640 County Road A, Ashland, NE 68003 (US). PETERS, Eugene, M., Jr. [US/US]; 1589 Constance Ave, Kettering, OH 45409 (US). EYAL, Aharon, M. [IL/IL]; 16 Levy, Jerusalem (IL). PARK, Ki [US/US]; 2509 South Park Lane, Dayton, OII 45458 (US).
- (74) Agent: DeGRANDIS, Paula, A.; Cargill, Incorporated 15407 McGinty Road West, Wayzata, MN 55391 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GII. GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA. UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, I.S, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and he granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CII. CN. CO, CR. CU. CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, II, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GII, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ. TM). European patent (AT. BE, BG, CII, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, C1, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR TREATING CORN AND MILLETS

(57) Abstract: There is described a method of treating corn and/or millet(s) and parts thereof with an agent selected from nonprotein, non-amino acid. non-vitamin, organic sulfur containing compounds; thiosulfate; and sodium dithionite. Also disclosed is a method for using the agent treated material in the production of starch products and fermentation feedstocks. Also disclosed is a method for using the agent treated material as a fermentation feedstock.